

REMARKS

Claims 1-9, 11 and 12 are pending in the above-identified application. Claim 10 has been inserted into claim 1. Claim 1 has further been amended in accordance with the suggestion stated by the Patent Examiner in connection with the issue under 35 U.S.C. § 112 discussed below so as to correctly recite that the amount of water vapor is "1 to 2 times the stoichiometric amount." It is submitted that all of the presently pending claims are fully supported by the original disclosure of the present application and it is requested that all of the changes to claim 1 be entered of record.

The Interview Summary Form acknowledges that a personal interview was conducted between Applicants' representative and the Patent Examiner on January 27, 2005. The form states as the description of the substance of the interview that... "discussed the rejection and Rohr '560 (USP 5,340,560) reference. Applicants' representative will submit additional arguments and claim changes."

***Discussion Regarding Rohr '560***

Applicants' representative pointed out at the interview that Rohr '560 fails to disclose or suggest the linear velocity feature of the method of the present invention such that particulate silica

having a specific surface area in the range to be inserted in claim 1 cannot be obtained. It was further pointed out that the comparative test results summarized in Table 1, at page 17 of the present specification show that an improper gas outlet linear velocity as employed in Comparative Example 1 results in disadvantageously inferior transparency properties as compared to Examples 1-3 (present invention) for example. The Examiner stated that she will consider the changes to claim 1 and the comparative test results upon the filing by Applicants of the present Reply.

***35 U.S.C. § 112 Issues Discussed at Interview***

It was further pointed out at the interview that claim 1 would be amended so as to correct the water vapor amount range to be "1 to 2 times the stoichiometric amount in scheme (I)." The Examiner generally indicated that this does appear to remove the outstanding rejection under 35 U.S.C. 1.112 with respect to the written description requirement as stated at pages 2-3 of the previous Office Action of November 16, 2004.

***Issue Under 35 U.S.C. § 112, First Paragraph***

Claims 1-12 have been rejected under 35 U.S.C. 112, first paragraph, as the Patent Examiner asserts that the range of

flammable gas fed per mol of organohalosilane of  $\frac{1}{2}$  to 3 moles fails to be supported by the written description of the present application. As noted above, claim 1 has been amended so as to correct the recited range of the amount of water vapor thereby removing the basis for this rejection. Consequently, it is requested that this rejection be withdrawn.

***Issues Under 35 U.S.C. § 103(a)***

Claims 1-12 have been rejected as being unpatentable over Rohr '560 (USP 5,340,560), optionally further in view of Nishimine '860 (USP 5,855,860). Claim 10 has been inserted into claim 1 and correspondingly cancelled. It is requested that this rejection be withdrawn based on the following reasons.

***Present Invention and Its Advantages***

As noted above and indicated during the interview, one advantageous feature exhibited by the method of the present invention is the production of particulate silica which is used to make silicone rubber composition products that exhibit unexpectedly, advantageously improved transparency characteristics as evidenced by the comparative test results shown in Table 1 at page 17 of the present specification. The comparative test results

make it evident that unless the combination of both the use of the proper gas outlet linear velocity and water vapor amount is employed as in Examples 1-5 (present invention), disadvantageous transparency properties results in the ultimately produced silicone rubber composition product as shown by the poor transmittance properties exhibits by Comparative Examples 1 and 2.

***Distinctions Between Present Invention and the Rohr '560 and Nishimine '860 Documents***

Rohr '560 relates to a method for making fumed silica, particularly to burning a mixture of a fuel, such as hydrogen, a silicon compound, such as silane or an organosilane, and oxygen or an oxygen containing gas in a combustion chamber to produce aggregates having an average convex perimeter in the range of about 0.12 micron to about 0.60 micron. Rohr '560 in column 3, lines 13-17 discloses that "A mixture of about 60 wt% of  $\text{CH}_3\text{SiCl}_3$  and about 40 wt% of  $\text{SiHCl}_3$  within about a 1.3 to 1.5 mol% range can be satisfactory used with ... about 10 to about 25 mol% hydrogen. Thus, Rohr '560 discloses that the ratio of hydrogen to the organosilane ranges from  $6.67(=10/1.5)$  to  $19.23(=25/1.3)$ .

Rohr '560 fails to disclose or suggest the combination of the use of appropriate gas outlet linear velocity and water vapor

amount parameters as employed in the method of the present invention. Thus, Rohr '560 fails to provide any reasonable basis for a suggestion to obtain the advantageously improved particulate silica produced by the method of the present invention which is then employed to make silicone rubber composition products exhibiting unexpectedly, advantageously improved transparency properties as evidenced by the comparative test results discussed above. Therefore, significant patentable distinctions exist between the present invention and Rohr '560 such that the above-noted rejection should be withdrawn.

Nishimine '860 fails to make up for the above-noted deficiencies of Rohr '560. Nishimine '860 is cited because of the disclosure therein of a quadruple tube burner, but this reference fails to disclose or suggest many significant features of the present invention, and even if combined with Rohr '560, fails to provide any adequate suggestion of the present invention.

Consequently, significant patentable distinctions exist between the present invention and each of the Rohr '560 and Nishimine '860 documents, whether taken separately or combined. Therefore, the above-noted rejection should be withdrawn.

**Conclusion**

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Andrew D. Meikle (Reg. No. 32,868) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

Andrew D. Meikle, #32,868

ADM/bsh  
0171-0801P

P.O. Box 747  
Falls Church, VA 22040-0747  
(703) 205-8000